WETLANDS SUBCOMMITTEE OF THE ENVIRONMENTAL QUALITY SERICE COUNCIL

Legislative Services Agency
200 West Washington Street, Suite 301
Indianapolis, Indiana 46204-2789
Tel: (317) 232-9588 Fax: (317) 232-2554

Authority: ***P.L. 248-1996 (SEA 138)***

MEETING MINUTES[1]

Meeting Date:	**August 28, 2000**
Meeting Time:	**1:30 P.M.**
Meeting Place:	**State House, 200 W. Washington St., Room 401-B**
Meeting City:	**Indianapolis, Indiana**
Meeting Number:	**1**

Members Present: Sen. Vi Simpson, Chair; Sen. Kent Adams; Sen. Glenn Howard; Mike Carnahan.

Members Absent: Rep. David Wolkins; Randy Edgemon; Alice Schloss.

Call to Order. Sen. Vi Simpson, Chair of the Wetlands Subcommittee, called the meeting to order. After an introduction of subcommittee members and advisory members, Sen. Simpson explained that IDEM is in the process of promulgating rules pertaining to wetlands protection. She asked Matt Rueff, IDEM Assistant Commissioner, Office of Water Management, to provide the subcommittee with an overview of the rulemaking process.

Overview of the Wetlands Rulemaking Process. Mr. Rueff made the following remarks. Wetlands differ from flowing waters, inland lakes, and Lake Michigan. Wetlands are part of the surface waters as delineated by the U.S. Corps of Engineers. Current water quality standards may not protect the unique physical, chemical, and biological qualities of wetlands. The

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rulemaking procedure is attempting to create a standard to reflect and protect the uniqueness of wetlands. The rulemaking process is also attempting to provide a water quality certification procedure to regulate activities that impact wetlands.

The Clean Water Act. According to Mr. Rueff, the Clean Water Act requires states to regulate wetland resources through a Section 401 water quality certification. In the early 1990s, EPA encouraged states to move forward to pass water quality standards that consider the uniqueness of wetlands.

Public Input on the Proposed Rule. According to Mr. Rueff, the Water Pollution Control Board deferred preliminary adoption of the water quality standards in order to allow IDEM staff time to meet with individual organizations and citizens who raised concerns about the proposal and in order to provide the subcommittee with an opportunity to reflect on wetlands and issues related to water quality standards. IDEM has been meeting with interested parties over the last couple of months and will continue to do.

Over 200 organizations have participated in discussions. IDEM has conducted both regional meetings and meetings in Indianapolis. IDEM has met with the Indiana Manufacturers' Association, the Chamber of Commerce, utilities, environmental organizations, representatives of counties, and others who wanted to meet. They plan to meet with municipalities. IDEM continues to discuss specific issues and hopes to return a draft to the Board that is responsive to all concerned.

Indiana's Wetland Resources. Andrew Pelloso, Senior Environmental Manager, Office of Water, IDEM, provided the subcommittee with an overview of wetland resources in Indiana. (See Exhibit 1.)

Definition of Wetlands. According to Mr. Pelloso, wetlands are defined by the Army Corps of Engineers, the U.S. EPA, and IDEM as

> Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands must contain hydric soils, hydrophytic plants, and wetland hydrology.

Decline in the Number of Wetlands. According to Mr. Pelloso, in the 1780's, 5.6 million acres of wetlands existed in what is now Indiana which constituted 24% of the state's 23 million acres of surface area. By the 1980's, approximately 800,000 acres of wetlands remained or 3.7% of the state's surface area. These figures were taken from the National Wetland Inventory compiled by the U.S. Fish and Wildlife Service in the 1980s.

To conduct an inventory of the number of jurisdictional wetlands that meet the three parameter test would be beneficial; however, compiling the inventory would be expensive. No state in the country has an inventory of jurisdictional wetlands. To determine what is a jurisdictional wetland would require an on-site field visit to dig test pits, assess vegetation, and map boundaries.

Distribution of Wetlands. According to Mr. Pelloso, every county contains some wetlands. Wetlands acreage within counties ranged from 633 to 27,467. Wetlands are mostly concentrated in the northern part of the state with some large concentrations of wetlands in the Wabash and Ohio River Valleys.

Benefits of Wetlands. According to Mr. Pelloso, wetlands provide

- water quality protection
- groundwater and surface water recharge
- flood protection
- shoreline erosion protection
- fish and wildlife habitat
- timber, fiber, produce, and animal products
- recreation and aesthetics

IDEM's Authority to Regulate. According to Mr. Pelloso, Section 401 of the Clean Water Act states that for any federal permit or license that would authorize a discharge into waters of the United States, the state must certify that the discharge is in compliance with the state's water quality standards. Regulated activities involve the placement of fill materials or the discharge of pollutants into a water body. Of the activities that IDEM regulates, 99% require a section 404 permit from the Army Corps of Engineers.

The certification program derives its authority from Section 401 of the Clean Water Act. The Act outlines the responsibilities of the states which include certifying projects and providing public notice of the receipt of application for a 401 certification. The Act outlines the basic power of the state which is to determine if an activity is in compliance with the state's water quality standards. The water quality standards encourage the maintenance of existing uses and anti-degradation. Standards are both narrative as well as numeric for specific pollutants.

IDEM's 401 certification program regulates two types of activities. First, certification is required if a project proposes to place dredge or fill material in a wetland, river, lake, or stream. Second, authorization is required if heavy equipment is used to clear off woody vegetation or to disturb the upper layer of the wetland. Heavy equipment includes bulldozers, backhoes, etc. IDEM does not regulate the use of a chain saw to cut down trees.

Overview of the U.S. Army Corps of Engineers' Program. Jim Townsend, U.S. Army Corps of Engineers, provided an overview of the federal program. The federal permit program requires anyone who conducts dredge or fill activities to obtain a permit from the Corps before the work is begun. The Corps originally derives its authority from the Rivers and Harbors Act of 1899, which regulated activities on navigable waters. In the 1970s, Congress expanded the program to regulate the discharge of dredge or fill material into the waters of the U.S. In the last 25 years, the scope of the program has increased primarily as a result of legislation or judicial review.

The program now regulates all waters of the U.S. which includes both navigable and non-navigable. In Indiana, all tributary systems that drain into the Ohio River, whether they be temporal or intermittent, are included. The Corps also regulates human made waters, which can range from areas where a pit has been dug to ponds installed to naturalize or attract water fowl. Abandoned surface mines may also be included. The Corps regulates wetlands which may occur adjacent to water or as an isolated depression in the landscape. The Corps uses a 1987 wetland delineation manual to determine the boundaries of wetlands as well as jurisdiction.

Three Types of Permits. According to Mr. Townsend, although exemptions for surface mining and agriculture exist, the Corps issues three types of Section 404 permits: general nationwide permits, general regional permits, and individual permits. If an activity does qualify for a general nationwide or regional permit, an individual permit may be necessary, which requires a more formal review. The Corps cannot issue a 404 permit until the state approves a Section 401 certification. The state can only issue of Section 401 certification if the project complies with state water quality standards. If the state does not issue a Section 401 certification, the Corps denies the Section 404 permit, typically without prejudice.

Requirements for General Nationwide Permits. According to Mr. Townsend, when issuing a general nationwide permit, the Corps considers the area that the activity will impact. In the past, some general nationwide permits have allowed up to 10 acres of impact. However, the federal threshold is decreasing in order to protect the aquatic environment. Currently, many general nationwide permits do not allow an activity that will have an impact on more than one-half of an acre.

Notification requirements have also changed. In the past, the Corps did not have to be notified unless the activity resulted in an impact on more than one acre. Currently that threshold has dropped to one-tenth of an acre. In many cases, if an activity impacts a wetland, regardless of the acreage involved, the Corps must be notified.

General Regional Permits. According to Mr. Townsend, the Corps also issues general regional permits. A particular Corps district may develop a general regional permit for a particular region. The Corps recognizes the need to work with state agencies in developing general regional permits so that the regional permit will be as consistent as possible with state regulations in addition to being fair to developers.

Recognizing the changes that have taken place in the general nationwide permits, the Corps began work about a year and a half ago to develop a new general regional permit in Indiana that would authorize up to one acre of impact provided that an activity has a Section 401 certification. Complementing the state program allows the Corps to spend more of its resources conducting compliance and enforcement and reduces duplication at the state and federal levels.

An applicant would not qualify for a general permit if the impact affected more than one acre. Additionally, the Corps has some discretion if they believe that the activity will have more than a minimal impact. The Corps would be concerned about any activity that could have an impact on more that one half of an acre if the Corps were concerned about the resource. In these cases, the Corps requires the applicant to go through the individual permit review.

Individual Permits. According to Mr. Townsend, when a project requires an individual permit, a public notice is distributed by the Corps. The Corps rules on three concerns. First, the Corps determines whether the impacts are significant enough to require an environmental impact statement as specified under the National Environmental Policy Act. If not, the Corps will prepare an environmental assessment. The Corps also must determine if alternatives are possible. Is the proposed project the least damaging practical alternative? Third, the Corps must insure that their permit decision is not contrary to public use.

The authorization for a general and individual permits is the same. The threshold for the level of impact may be different. If an individual proposes to fill a half-acre of wetlands for whatever purpose, that activity might qualify under the general permit. Very few permits are denied, but a large percentage are modified to meet regulations to avoid, minimize, or mitigate impacts to the environment.

The types of activities regulated can range from the installation of a utility line either above or below the water body to the construction of a seawall or a building pad. The permit is activity specific. The Corps routinely conducts compliance on issued permits and routinely investigates unauthorized activities.

The Role of the Indiana Department of Natural Resources (DNR). Steve Jose, DNR, stated the following. The DNR does not administer a wetland regulation. They work with IDEM and the Corps in some circumstances in administering three laws that have overlapping jurisdiction: the Flood Control Act, the Lake Preservation Act, and the Ditch Act. These laws do not regulate

wetlands per se, but they do regulate areas that occur adjacent to water bodies. The DNR has criteria for permit application approval. Criteria that considers the environment usually considers fish and wildlife habitat and botanical resources habitat. Under the authority of the Lake Preservation Act, the DNR considers impacts to the natural resources and natural scenic beauty of the water body in question.

Many wetlands occur in isolated situations. They are low areas that collect drainage. They have no inflow or outflow. A number of wetlands occur to other water bodies. In these instances, the three agencies involved may have overlapping jurisdiction. In these circumstances the DNR communicates with the other agencies. The Corps, under its public notice provisions, notifies the DNR when the Corps receives individual 404 permit applications. In these instances, the DNR offers comments and recommendations to the Corps.

The DNR program can be broad in nature because the DNR conducts a public interest review. Factors considered in public interest reviews include safety, navigation, general water quality, wetland issues, and consideration of private property. DNR decisions must also comply with federal laws, such as the Endangered Species Act and the National Historic Preservation Act.

Notice of 401 Application. According to Mr. Pelloso, when IDEM receives an application for certification, IDEM serves public notice to sister agencies and to a variety of interested parties. In cases of overlapping jurisdiction, there is ongoing communication. In many cases, representatives of all three agencies meet with the applicant to discuss the project and requirements.

Overlapping Jurisdiction. According to Mr. Pelloso, between 12-14% of all projects that all three agencies review have a single point of overlap that requires the applicant to comply with requirements from all three regulatory entities. The agencies work hard to ensure that requirements are consistent as well as protective while allowing reasonable activities to occur in protected areas. The state and the Corps are available for consultation.

Water Quality Standards. Mr. Pelloso indicated that the Water Pollution Control Board adopts the water quality standards. IDEM drafts them through an extensive workgroup process. The standards contain both numeric and non-numeric standards. Numeric standards are predominantly used for the regulation of effluent discharges. For example, if a metal plating facility is discharging chrome, the state has a water quality standard that identifies a numeric range that cannot be exceeded for that pollutant without violating the standard. The standard is designed to protect aquatic life and human health.

The basic placing of fill materials into a water body removes the physical and biological properties of the water body, whereas the discharge of an effluent that contains some pollutants might not remove the biological or physical properties. The receiving water body would still exist. The issue is whether the pollutant will cause an adverse impact to the fish and wildlife and human health.

Whether an activity results in the discharge of pollutants into a water stream or results in dredge or fill being placed in the water stream, the effect is the same. It is the introduction of a pollutant into a water body.

According to the water quality standards, a pollutant is any material or substance that would cause or contribute to the deleterious effects on the water quality. If a person places fill into a wetland, the wetland is gone. If a wetland is filled in order to install a parking lot, the former wetland is no longer supporting existing uses and it no longer has its biological properties. The effect is comparable to a metal plate facility running the line off the chromium plating straight into the water which would destroy the fish and have an adverse effect on the public water

supply. The restrictions on discharges are easier to understand because the standard is numeric. Section 401 considers filling a wetland but not draining it. Sen. Simpson noted that the drainage of wetlands is a statutory issue.

The state looks at each wetland within the proposed area for the project. There is no size limitation. With the current general permit, if there is an impact to a wetland that is a tenth of an acre or less, the state has already granted certification if they determine that the activities are truly minimal in nature. If a project involves the filling of a series of wetlands that added together would consist of a tenth of an acre, the state would regulate the activity. The state considers the total impact on all the wetlands in the area of the proposed project.

Of the wetlands that remain, half or more are less than an acre in size. They are highly fragmented. The water quality standards recognize that Indiana has a lot fewer wetlands than other states. The Corps' perspective is a national perspective. They allow activities on a national level that singularly or cumulatively would not have an adverse impact on water resources of the country. The state has a narrower lens. What the state sees is that the state's wetland resources are significantly degraded. The wetlands that remain provide important functions. So the state's criteria are different.
Compensatory Mitigation. According to Mr. Pelloso, the regulatory program allows for compensatory mitigation or the creation of wetlands or aquatic bodies to offset the loss of existing wetlands. Congress did not design the program to be absolute protection of water bodies. Congress contemplated that the state or federal government would want to authorize some activities even though they destroyed the water body. Congress provided the mechanism of mitigation to allow agencies to address circumstances in which the water body would be destroyed.

IDEM has different ratios based on the type of wetland to be impacted. This ratio reflects the fact that humans are not as good at creating wetlands as nature. There is a loss in the inability to recreate what was there. Furthermore, as a science the creation of wetlands is relatively young. The IDEM ten-year study suggested that some wetland mitigation sites were very successful whereas others were not. Numbers from their study and some assessments they conducted bear out that a three-to-one ratio in many cases results in a one-to-one replacement because of the difficulty in recreating a wetland. Additionally, the ratio helps provide for temporal loss of water quality. A wetland that has trees that are 25 to 50 years old will not be replaced overnight with a new wetland. Mitigation ratios reflect how the agency has been doing business with regulated entities over the last five or six years. Agency decisions during this time have been successfully defended in court.

Criteria Used by IDEM to Certify. Mr. Pelloso indicated IDEM evaluates projects on a case by case basis. First, they evaluate the water body to the extent possible. They do not look at all the biological components. To categorize wetlands by quality is difficult. Should they be categorized by their water quality, the assemblage of plants, or their hydrology? Realistically, all components need to be evaluated, but the evaluation is limited by resources.

Secondly, IDEM considers if the wetland is connected to other water bodies. Is it harboring exceptional aquatic life? IDEM also considers whether the project could be altered in order to avoid or minimize the impact to the wetland. Oftentimes commercial developments consider only one way to place a building on a site. If the wetlands is located in the middle of the property, is there any way to minimize the impact by changing the outline of the building? If no reasonable alternative exists, the agency considers mitigation.

IDEM receives approximately 400 applications for 401 certification. The number of denials runs between five and eight percent. Of the five to eight percent, about 90% result in some sort of negotiated settlement which involves making changes to the project or to IDEM determination.

Consumer Responsibility. According to Mr. Pelloso, the burden is on the user to be aware if he or she is affecting a wetland in much the same way that the burden is on the buyer of a piece of property that had a former gas station on it to insure that underground storage tanks have been removed. If a consumer buys property that contains items of archeological significance, the consumer is under certain obligations to use due diligence to assess the site.

Wetland Mitigation Banking. Mr. Rueff indicated that IDEM, DNR, the U.S. Fish and Wildlife Service, the Corps of Engineers, and the USDA are working on a document regarding mitigation banking. A mitigation bank is an organized mechanism that allows people to withdraw or save credits relative to mitigation activities.

Mr. Townsend noted that wetlands are created in mitigation prior to the impact, so that when the impact occurs, the new wetland is already functioning and can compensate for those impacts. Without a bank, the compensation efforts occur after the impact has occurred.

Public Comments. George Scholka, Save the Dunes, suggested that 80% of the wetland which is mostly invertebrate is ignored in the assessment that determines whether a permit should be granted. The result can be disastrous. He is concerned about the suggestion that the functionality of a wetland can be replaced relatively easily. He suggested that the replacement wetland can never be as good as the original wetland because of the complexities of the wetland. Wetlands will not revert to its original form in 50 years. There is no comparison between a wetland that is 50 years old and one that is ten thousand years old. The problem is extremely complex. He would like to see facts that show there would be an economic impact.

Rick Wajda, Indiana Builders Association, stated that the homebuilders industry was concerned about the tier two wetlands and the up-front mitigation plans before a project is approved. Builders may have to wait three to seven years before a mitigation wetland is proven successful. Many banks may not be interested in floating loans for this period. Also, if the builder mitigates offsite, he does not understand why the builder could not proceed with the project.

Jim Davis noted his concerns about mitigating wetlands in advance and proving that it's been successful. The time line to do that makes a project five to seven years from start to finish. Additionally, he is concerned that the whole concept of tier one and tier two wetlands is problematic. The 1987 Corps manual does not make this distinction. He suggested that the state follow the definitions of wetlands as noted in the Corps manual as opposed to using the proposed tier one and tier two. When businesses hire a consultant to determine if a wetland is present, they use the 1987 Corps manual. They submit the survey to the Corps, but IDEM could rule that the wetland is a tier two wetland which requires additional processing. The third concern pertains to IDEM's opinion that the rule will result in no economic impact. He believes that IDEM may not be the best agency to determine the potential impact.

Mike Brown, American Electric Power, noted that rules should have predictability, certainty, and timeliness. Some time lines proposed in the draft appear to be longer than necessary. He has no way of looking at the rule and determining if a wetland is a tier one or two which results in uncertainty. Furthermore, the water quality standards set out a numeric standard for lakes and streams. Standards for wetlands should be different. To illustrate, a level of e-coli in a lake and stream makes water impaired. An isolated wetland with waterfowl may have a high e-coli content that also make it impaired. He questioned whether a standard, such as the e-coli standard, is appropriate for a wetland when the source of the e-coli is from wildlife.

Lori Olivier related instances where trees in a wetland were decimated, but she discovered that violations would occur only if the tree stumps were used to fill a wetland, which did not seem to her to be protective of the wetland.

Dr. Dan Willard explained that according to federal regulations, normal practices of soil culture, draining, and aspects of agricultural are not covered by the rule. So, if someone cuts down trees, the activity is not a violation. However, whether cutting down the trees affects the water quality is another issue.

Patrick Bennet, Indiana Manufacturers' Association, indicated that avoidance and minimization do not have as much appeal as mitigation. His concerns pertain to the proposed definitions of a tier one and tier two wetland. The classification of species in a tier two wetland was very broad and encompassed many things. The second concern for a tier two mitigation was that it be done up-front. In practice, to have to do the mitigation up-front and then start the project, results in an indefinite time frame. Also, he asked what determines a successful wetland. Successful is ambiguous. Another concern was that the wetlands created for mitigation purposes are protected in perpetuity. It is possible that the wetland would not be successful and another use of the property might be appropriate.

Tonya Galbraith, Indiana Association of Cities and Towns, stated that she would submit her concerns in writing to the subcommittee. (See Exhibit 2.)

Sandy Miles, volunteer with the Sierra Club, stressed the importance of wetlands. She was concerned to hear people suggest that it is okay to fill wetlands if they are filled with pollutants. She noted that wetlands filter pollutants. Strong rules are needed because of the history of the 401 certification program. IDEM's study reviewed 345 mitigation sites. The testimony suggested that most projects use mitigation as opposed to avoiding or minimizing the impact. Of the 345 sites studied from 1986 to 1996, over 14% of the mitigation projects had never been started while 20% were started but not completed. About 35% had either not been started or not completed. While over 60% were considered constructed, a classification of construction did not mean that the site was complete or in compliance and certainly not functioning successfully. Many constructed sites were total failures. Better enforcement is needed as well as strong, clear rules. We need to make sure that we are not destroying wetlands, and the study shows that we are. More staffing might help. Also, a study of successes or experiences in other states might be helpful.

With respect to the benefits of wetlands, an acre of wetland can store one and one-half million gallons of water during a flood. Wetlands filter water and assist with city and agricultural run-off. There would be a loss to the state in terms of flooding and water pollution. With respect to mitigation banking, mitigation may not be successful. Any mitigation should be as close to the site as possible.

Mike Sandefur suggested that he is not certain if there has been a loss of wetlands. He indicated that the report cited projects wherein wetlands were never completed. He speculated that maybe the wetlands were never destroyed. Someone may have acquired all the necessary permits and decided not to do the project. The Corps talked about the number of mitigation sites, but not the number of acres. If there is a four to one mitigation, maybe one acre did not function but the other three did. Another concern is the complicity of these rules. With respect to mitigation, IDEM would be duplicating what the Corps does. Maybe DNR or another agency should administer the program. In his opinion, the state should defer to the Corps.

Travis Worl, Indiana Association of Counties, indicated that he would submit his concerns in writing. (See Exhibit 3.) He highlighted the Association's concerns which included tier one and tier two classification of wetlands; the inclusion of a half-mile radius for any species that might not be located in the wetland but within a half-mile radius; the time limit of one year for IDEM to process applications; the socioeconomic figures that IDEM is considering to determine if the impact should be allowed; and the section which states that IDEM shall assume that there is a practical alternative to the impact unless the applicant proves otherwise.

Tim Maloney, Hoosier Environmental Council, stated that his organization believes that there were a great deal of positives in the rule as proposed. First, in terms of establishing a strong philosophy of avoidance of impact, which mirrors the Corps' philosophy, is positive. The rule recognizes the important contributions of wetlands and the scientific factors involved in classification. On the other hand, his organization has concerns about mitigation banking, noting that the current interagency agreement is inadequate. The concerns from the regulated community that the up-front mitigation requirements are too burdensome speaks to the fact that wetlands replacement is a very uncertain science. He is concerned that the statistics discussed indicate that many mitigation projects have not been completed. A good assessment system to determine if a completed wetland is successful does not exist. The rate of noncompliance is increasing according to IDEM's numbers. All these factors point to the need for stringent mitigation requirements that should bolster an avoidance policy. The language should be clear and encourage the regulated industry to avoid impacts. Finally, with respect to economic impact, given the number of remaining wetlands, it would seem unlikely that wetlands would be encountered often. How far do we go to eliminate something that we know is a biologically and scientifically important resource? How do we protect them and still have the human uses of land that we're going to have?

Fred Andes, Barnes and Thornburg, stated that existing policies and practices need to be identified and evaluated and the best alternatives considered. Other state practices may be helpful. The current proposal goes beyond what is needed to address wetlands impact.

Next Meeting Dates. The next meetings were scheduled as follows:

Date	**Time**	**Topic**
Sept 6	1:30 p.m.	Water Quality Standards and Tier One and Two Classifications
Sept 13	1:00 p.m.	Mitigation
Sept 28	1:30 p.m.	Economic Problems and Benefits
Oct 19	1:30 p.m.	Recommendations

Participants are asked to bring prepared comments.

Adjournment. The meeting was adjourned at approximately 4:20 p.m.